



## Science Toolkit: Grade 5 Objective 1.A.1.f

Student Handout: Science: Grade 5 Objective 1.A.1.f

### Standard 1.0 Skills and Processes

#### Topic A. Constructing Knowledge

Indicator 1. Gather and question data from many different forms of scientific investigations which include reviewing appropriate print resources, observing what things are like or what is happening somewhere, collecting specimens for analysis, and doing experiments.

Objective f. Identify possible reasons for differences in results from investigations including unexpected differences in the methods used or in the circumstances in which the investigation is carried out, and sometimes just because of uncertainties in observations.

#### Selected Response (SR) Item

#### Question

A teacher told four students to each measure the mass of a closed container of water. The students took turns measuring the mass. Their data are shown in the table below.

**MASS OF CONTAINER**

Student	Closed Container of Water (grams)
1	100
2	99
3	98
4	102

Which statement best explains why there are four different measurements?

- A. The balance was new.
- B. Each measurement was done at a different time.
- C. Each student used a different process to find mass.
- D. Movement caused the container to lose or gain mass.

Correct Answer

- C. Each student used a different process to find mass.

## Question

A teacher told four students to each measure the mass of a closed container of water. The students took turns measuring the mass. Their data are shown in the table below.

**MASS OF CONTAINER**

Student	Closed Container of Water (grams)
1	100
2	99
3	98
4	102

Which statement best explains why there are four different measurements?

- A. The balance was new.
- B. Each measurement was done at a different time.
- C. Each student used a different process to find mass.
- D. Movement caused the container to lose or gain mass.